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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,680	12/17/2003	Andrew Chang	FOUND-0006C	4105
49680	7590	08/03/2006	EXAMINER	
FOUNDRY-THELEN REID & PRIEST LLP			HOM, SHICK C	
THELEN REID & PRIEST LLP			ART UNIT	
P.O. BOX 640640			PAPER NUMBER	
SAN JOSE, CA 95164-0640			2616	

DATE MAILED: 08/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/736,680

Applicant(s)

CHANG ET AL.

Examiner

Shick C. Hom

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed 5/2/06 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In pages 9-10 of the response, applicant argued that Berenbaum does not teach or suggest "each blade outputs serial data streams with the same in-band control information in multiple stripes to the switching fabric" is not persuasive because while examiner agrees that Berenbaum does not teach the use of striping technique; Bianchini, Jr. teaches the use of striping as recited in the abstract; the missing element not taught in Bianchini, Jr. and which is found in Berebaum is the plurality of blades, i.e. circuit cards, coupled to the switching fabric via serial pipes, i.e. links, for outputting the serial data streams to the switching fabric which is clearly recited in col. 4 lines 35-49 and col. 4 line 65 to col. 5 line 44. The data streams having the same in-band control

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information in multiple stripes is taught in Bianchini, Jr. Examiner agrees that while Bianchini, Jr. does not specifically recite control information being in multiple stripes, col. 1 lines 17-42 recite the that data stream being striped are packets and clearly each packet contain control information in its header such as destination address and all packets transmitted to a specific destination would have the same destination address, i.e. same control information.

***Claim Rejections - 35 USC § 112***

2. Claims 1-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 10, 15 lines 5 and 6, respectively, which recite "the same in-band control" lacks clear antecedent basis because no same in-band control have been previously recited in the claim and therefore the limitation is not clearly understood. Claims 2-9, 11-15, and 16-26 are rejected under 35 U.S.C. 112, second paragraph because they depend from rejected claims 1, 10, and 15.

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***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-3, 6-11, 14-21, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bianchini Jr. (6,842,422) in view of Berenbaum et al. (6,272,144).

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Regarding claims 1-3, 6-11, 14-21, and 25-26:

Bianchini Jr. disclose a digital switch comprising: a switching fabric; including data streams with control information in multiple stripes to the switching fabric, and wherein the switching fabric uses the control information to control traffic flow of data in the multiple stripes through the switching fabric (see col. 2 lines 17-33 which recite the switching system comprising switch fabrics connected to interfaces for receiving stripes of data streams and col. 1 lines 6-14 which recite the switching system using the stripes of data from a data stream to switch the data stream) as in claims 1, 10, 15.

Regarding claims 2, 8, 16:

Bianchini Jr. disclose wherein the switching fabric includes a plurality of cross points corresponding to the multiple stripes (see Figs. 4-5 the switching fabrics 1-3 and col. 4 lines 12-24 which recite data striping being extended to network switch by striping across multiple fabrics constructed from central TDM resource in a switch).

Regarding claims 3, 7, 9, 11, 14:

Bianchini Jr. disclose wherein each cross point includes a plurality of port slices coupled to the plurality of blades (see col. 1 lines 17-43 which recite each switch fabric having input

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ports that receive packets and output ports that transmit packets).

For claims 1, 6, 9-10, 15, 17-21, 25-26, Bianchini, Jr. discloses all the subject matter of the claimed invention with the exception of the plurality of blades coupled to the switching fabric via serial pipes; wherein each blade outputs serial data streams with the same in-band control information in multiple stripes to the switching fabric.

Berenbaum et al. from the same or similar fields of endeavor teach that it is known to provide the plurality of blades coupled to the switching fabric via serial pipes; wherein each blade outputs serial data streams with the same in-band control information in multiple stripes to the switching fabric (see col. 4 lines 35-49 which recite multiple line cards connected to the switch fabric for in-band transfer of control information used to configure the transmission and col. 4 line 65 to col. 5 line 44 which recite the control information being a series of commands). Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide the plurality of blades coupled to the switching fabric via serial pipes; wherein each blade outputs serial data streams with the same in-band control information in multiple stripes to the switching fabric as

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taught by Berenbaum et al. in the digital switch of Bianchini, Jr.

The plurality of blades coupled to the switching fabric via serial pipes; wherein each blade outputs serial data streams with the same in-band control information in multiple stripes to the switching fabric can be implemented by connecting the blades or circuit cards using the serial pipes or links for transferring in-band control information of Berenbaum et al. to the switching fabric of Bianchini, Jr. The motivation for using the plurality of blades coupled to the switching fabric via serial pipes; wherein each blade outputs serial data streams with in-band control information in multiple stripes to the switching fabric as taught by Berenbaum et al. in the digital switch of Bianchini, Jr. being that it provides more efficiency for the digital switch since by using in-band control information to control traffic flow through the switching fabric the switch does not need to provide separate line card control interface.

***Allowable Subject Matter***

6. Claims 4-5, 12-13, and 22-24 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd



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paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

**Conclusion**

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Mon-Fri.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SH

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RICKY Q. NGO  
SUPERVISORY PATENT EXAMINER